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ABSTRACT

This brief booklet provides a shorthand key to the national geography standards and related geography themes. The themes represent an instructional approach to give focus to a lesson. The standards comprise the geographic subject matter, skills, and perspectives of geography K-12. The five themes flow through the 18 geography standards and can be used in the instruction of all of them at any grade level. Sample classroom strategies for instruction in the standards for grades 4, 8, and 12 are included. This guide provides a quick overview of the geography standards with sample indicators for performance. (EH)

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Key to the National Geography Standards

Geography for Life: National Geography Standards 1994

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Introduction: The Standards, and How They Relate To the Themes

FROM GEOGRAPHY THEMES TO GEOGRAPHY STANDARDS

In the past decade, instruction in geography from grades K to 12 has been organized around the five themes of geography: location, place, human/environment interaction, movement, and regions. The popularity of these content organizers set the stage for the development of two additional, more comprehensive instructional frameworks: the "Six Essential Elements" and the "Eighteen Geography Standards" within the elements. These two interlocking frameworks provide the structure of the new publication *Geography for Life: National Geography Standards 1994*.

HOW THEMES AND STANDARDS COMPARE

It is important to keep in mind that the five themes and the standards look at the same geographic universe. The themes represent an instructional approach; they allow a particular focus to be given to the lesson of the moment. The standards comprise the geographic subject matter, skills, and perspectives of geography. The 5 themes flow all through the 18 geography standards and can be used in the instruction of all of them, at any grade level.

WHAT EXACTLY ARE THE STANDARDS?

Geography for Life: National Geography Standards 1994 provides a powerful teaching resource for geography. It gives careful and exhaustive attention to the question, "What should students know and be able to do in geography at the completion of grades 4, 8, and 12?" The 18 geography standards represent the content, activities, and learning opportunities that have been written to answer that question.

THE NEXT PAGES: A SHORTHAND KEY TO THE STANDARDS AND RELATED GEOGRAPHY THEMES

All 18 standards are included within the 6 essential elements. Following each standard, you will find an explanation of the standard, a list of each of the five themes that relates most closely to that standard, and sample classroom strategies for instruction in the standard for grade 4, 8, or 12. All of the following materials are derived from *Geography for Life: National Geography Standards 1994*.

HOW DOES THIS KEY DIFFER FROM THE STANDARDS?

This guide provides a quick and easy overview of the geography standards. Teachers who want to bring the geography standards to their teaching are encouraged to order the full document, *Geography for Life: National Geography Standards 1994*. (See page 11 for ordering information.) It provides detailed discussion of all the standards and supporting materials. In addition to the information outlined in the next pages, *Geography for Life* includes essays for each standard, statements about what a student should know, activities, learning opportunities, a detailed discussion of geographic skills and perspectives, and student achievement profiles. The standards were written, reviewed, and edited by teachers deeply involved in the real teaching of real kids in the real world.

THE SIX ESSENTIAL ELEMENTS AND EIGHTEEN GEOGRAPHY STANDARDS

I. THE WORLD IN SPATIAL TERMS

1. Maps and other geographic tools for information in a spatial perspective
2. Mental maps and spatial context
3. Spatial organization of Earth

II. PLACES AND REGIONS

4. Physical and human characteristics of places
5. Regions interpret Earth's complexity
6. Culture and experience influence perception of places and regions

III. PHYSICAL SYSTEMS

7. Physical processes shape patterns of Earth's surface
8. Characteristics and distribution of Earth's ecosystems

IV. HUMAN SYSTEMS

9. Human populations
10. The nature and complexity of Earth's cultural mosaics
11. Patterns and networks of economic interdependence
12. Human settlement
13. Forces of cooperation and conflict that shape Earth's surface

V. ENVIRONMENT AND SOCIETY

14. Human actions modify physical environment
15. Physical systems affect human systems
16. Meaning, distribution, and importance of resources

VI. THE USES OF GEOGRAPHY

17. How to apply geography to interpret the past
18. How to apply geography to interpret the present and plan for the future

FIVE SKILLS IN GEOGRAPHY

ASKING geographic questions

ACQUIRING geographic information

ORGANIZING geographic information

ANALYZING geographic information

ANSWERING geographic questions

Geography for Life helps students clearly see the world as a blend of physical and human phenomena through the application of a set of five skills especially appropriate for geography. Knowing how to use these skills is essential to implementing the 18 standards because the skills present a framework for a mode of inquiry unique to geography. These skills, which mirror the scientific method, are an extension of the geographic skills originally presented in *Guidelines for Geographic Education* (1984). They are intended to help students build their competence in geography from kindergarten through 12th grade, and beyond.

TWO PERSPECTIVES IN GEOGRAPHY

The **SPATIAL** Perspective

The **ECOLOGICAL** Perspective

Perspectives are points of view by which people look at the world. These are based on life experiences that incorporate values, attitudes, and beliefs. In *Geography for Life*, there are two main perspectives that provide focus for the 18 standards. One is the spatial perspective, which is the fundamental characteristic underpinning geography; the other is the ecological perspective, which reveals Earth as a complex system of interacting physical and human forces. Both are mindsets that present an expansive view of the world on a scale that ranges from local to global.

The Essential Elements and The Standards Within Them

(Please note: Each standard is written so it completes the sentence, "The geographically informed student knows and understands . . . .")

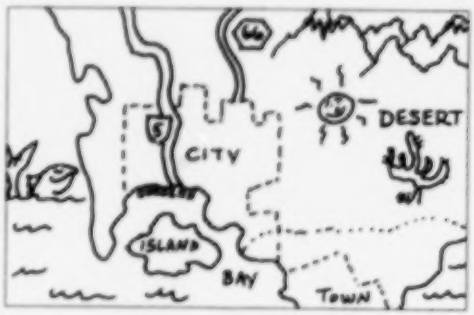
ESSENTIAL ELEMENT I: THE WORLD IN SPATIAL TERMS

Geographers strive to observe and understand the ordered patterns that blanket Earth's surface. Where things are, how they are arranged, why they are in such locations, and how these various phenomena relate to each other are all aspects of seeing the world in spatial terms.

STANDARD 1

How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective

Maps are the most commonly used representations of detailed geographic information on features of places. Along with other tools such as globes, aerial photographs, satellite images, and statistical databases, they bring the whole world into focus. Maps range from simple sketch maps to complex Geographic Information Systems (GIS) analysis.



Related themes: Location, Place

Example: Grade 8—Select, use, and make maps, models, and database images to analyze the distribution of physical and human features.

STANDARD 2

How to use mental maps to organize information about people, places, and environments in a spatial context

A mental map exists only in the mind's eye. It represents each individual's knowledge of the location of geographic features such as countries, cities, seas, mountain ranges, and rivers. A mental map is also made up of approximate size dimensions and cultural characteristics. In scale, it may include our route to a local store or theater, or it may serve as the framework for the location of the Khyber Pass, Brasília, or the Yangtze Gorges. This map grows in complexity as experience, study, and the media bring us new geographic information.

Related themes: Location, Place, Regions

Example: Grade 4—Using labels and symbols, draw a memory map of the community, showing physical and human features.

STANDARD 3

How to analyze the spatial organization of people, places, and environments on Earth's surface

Human structures organize space. Pattern, regularity, and reason are inherent in the locations of cities, factories, malls, cemeteries, and other human landscape creations. To understand the spatial patterns and processes that organize Earth's surface, it is essential to know concepts such as distance, direction, location, connection, and association. Understanding these concepts enables one to say what factors influence a locational decision for a hospital, a county seat, a sanitary landfill, or a regional shopping center.

Related themes: Place, Human/ Environment Interaction

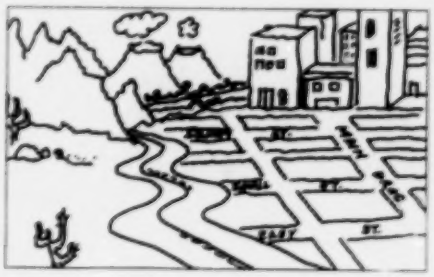
Example: Grade 12—Apply concepts of spatial processes and interaction to explain patterns of the distribution of physical and human phenomena.

ESSENTIAL ELEMENT II: PLACES AND REGIONS

Geography is concerned with the nature of places and the characteristics of regions. Why are things where they are? What identity do they have? How are specific places and regions characterized? How are they linked with other places and regions? What physical and human components appear to give them definition? The three standards in this element begin to explore perception and environmental appreciation. The geographically informed person understands that geographic learning is built upon a variety of perceptual frameworks as well as objective data.

STANDARD 4

The physical and human characteristics of places



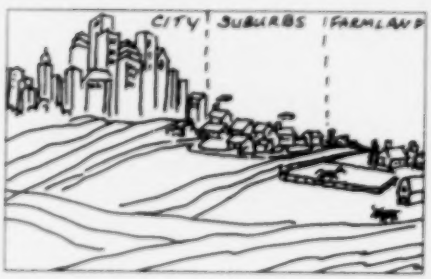
Places may be distinguished by their physical and human characteristics. Physical characteristics include landforms, climate, soils, hydrology, vegetation, and animal life. Human characteristics include language, religion, political and economic systems, population, and quality of life. Places change over time as new technologies, resources, knowledge, and ideologies are introduced and become part of a place's geography. Such change leads to the rise and fall of empires, may derive from shifts in climate or other physical systems, or may be generated by population expansion.

Related themes: Place, Human/Environment Interaction

Example: Grade 4—Using pictures, charts, maps, and diagrams, describe physical/human characteristics of places; infer processes that shape the landscape.

STANDARD 5

That people create regions to interpret Earth's complexity



Regions are defined as having one or more common characteristics that give them a measure of unity and make them distinct from surrounding areas. As worlds within worlds, regions simplify geographic analysis by organizing a specific area into a unit of explicit physical and human elements. The criteria in the definition of a region can be as precise as coastline or political boundaries, or as arbitrary as the general location of people loyal to a specific athletic team. Regions are human constructs, created to facilitate the understanding of a large, varied, complex, and changing world.

Related themes: Regions, Human/Environment Interaction

Example: Grade 12—Explain how changing physical, political, or economic conditions can change the definition, characteristics, and importance of a region.

STANDARD 6

How culture and experience influence people's perceptions of places and regions

Perception of all places and regions depends upon personal experience, culture, age, gender, and other factors. It is sometimes said that there is no reality, only perception. In geography there is always a mixture of both. For example, a wilderness can be attractive to a camper, a source of anxiety for a child, and a nuisance to a pioneering farmer.

Related themes: Regions, Place, Movement

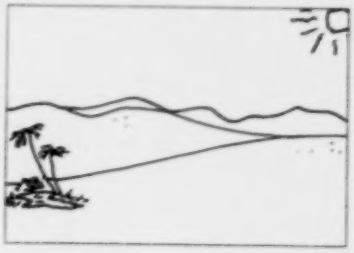
Example: Grade 8—Illustrate how cultural influences determine things such as land use and importance of places on the landscape.

ESSENTIAL ELEMENT III: PHYSICAL SYSTEMS

There is an order to the world that is created by the steady interplay of Earth's physical systems. The atmosphere is in steady motion with moving air masses reacting to different pressure zones. The hydrosphere is continually moving water via the water cycle. Erosion wears down the lithosphere and builds up sedimentary layers in the seas and lakes. Animal populations move in continuing response to physical systems that make up their environment, just as plant communities respond to their physical settings. A geographically informed person understands the nature of these physical systems and the influences they have on Earth as a setting for human life.

STANDARD 7

The physical processes that shape the patterns of Earth's surface



Physical processes create natural landscapes and environments arrayed across Earth's surface in spatial patterns. Understanding these forces is indispensable in daily decision-making, e.g., evaluating homesites in earthquake zones or flood plains, or building a highway along the ocean coastline. There is a systematic order in this continual remaking of Earth's surface. The geographically informed person understands the interplay of systems, forces, boundaries, thresholds, and equilibrium as they influence patterns on Earth's surface.

Related themes: Place, Regions

Example: Grade 4—Distinguish between characteristics of various landforms. Using maps, observe relationship between landforms and their climate/vegetation regions.

STANDARD 8

The characteristics and spatial distribution of ecosystems on Earth's surface

Ecosystems are communities of living things—plants and animals—interacting with each other and with the physical environment. Ecosystems are dynamic and ever changing. They are self-regulating, open systems that maintain flows of energy and matter that naturally move toward maturity, stability, and balance. By understanding how these systems and processes work in shaping the physical environment, students will be better able to comprehend the basic principles that guide environmental management. Such knowledge will enable them to anticipate the consequences of ongoing human effort to transform Earth's landscapes.

Related themes: Location, Place, Regions

Example: Grade 8—Explain how various ecosystems have an impact on human populations and predict ways that humans may interact with and change them.

ESSENTIAL ELEMENT IV: HUMAN SYSTEMS

Just as there is an inherent order in Earth's physical systems, there is order in the systems humans have developed in search of safe, productive, and satisfying niches on Earth. Patterns emerge as humans move, settle, develop economic interchange, and initiate systems of cooperation or conflict. At the base of this order in human systems is an inclination toward environmental perception, appreciation, and modification. As people create systems of spatial organization, they attain greater appreciation for the significance of specific places, resources, and environmental assessment. To the geographer, all human systems are fundamental to the six essential elements, for they provide the blueprint by which human use of Earth achieves not only order and utility, but also pollution and depletion.

STANDARD 9

The characteristics, distribution, and migration of human populations on Earth's surface

The characteristics and distribution of human populations are never static. Factors such as natural increase, war, famine, disease, and rate of urbanization play decisive roles in where people live. At any one time, some populations are bound to be migrating—leaving one place, striking out for a second, possibly settling in a third. The factors that give definition to a nation's population profile, patterns of growth or decline, and inclinations toward migration combine to be significant geographic information as we attempt to determine how Earth will probably have to support more than six billion people before the year 2000.

Related themes: Human/Environment Interaction, Movement, Regions

Example: Grade 12—Analyze the population issues and trace and evaluate programs designed to alter population characteristics.

STANDARD 10
The characteristics, distribution, and complexity of Earth's cultural mosaics

Culture defines each group's unique view of itself and others, and includes the material goods, skills, and social behavior transmitted to successive generations. It is expressed through art, language, beliefs and institutions, the built environment, and numerous other features. Cultural patterns are never static. They change in response to human migration, diffusion, and the steady introduction of new and competing cultural traits.

Related themes: Location, Regions, Place

Example: Grade 8—Illustrate how technology and human mobility have changed various cultural landscapes.

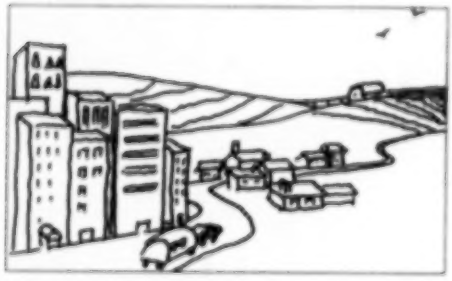
STANDARD 11
The patterns and networks of economic interdependence on Earth's surface

The goods that we need daily to make life work have sources all over the world. Economic networks at all scales, from local to global, have been developed to promote the efficient interchange of goods. Linkages of transportation, communication, language, currency, and custom have been fashioned out of the human desire to have more than what is available locally. For United States citizens, learning about the nature and significance of global interdependence is an essential aspect of being geographically well informed.

Related themes: Movement, Regions, Human/Environment Interaction, Location

Example: Grade 4—Determine and map the origins of food, clothing, and household items, and identify the transportation networks used in their distribution.

STANDARD 12
The processes, patterns, and functions of human settlement



Settlement is one of the most basic human responses to the environment. As social animals, humans achieve proximity, shared environments, and the opportunity to engage in effective economic and social interaction through settlement. Nearly half the human population has opted for city residence. However, there is a vast variety of cultural landscapes in urban settings, just as there is in village and town settings for most of the rest of the population. In all varieties of settlements, cultural landscapes reflect local resources and human preferences.

Related themes: Place, Regions, Movement

Example: Grade 12—Use maps, aerial photos, historical documents, and urban plans to trace and analyze the development of selected cities, noting distinct patterns in land use in various sections of an urban settlement.

STANDARD 13
How the forces of cooperation and conflict among people influence the division and control of Earth's surface

The tendency to divide space into segments that provide identity and a sense of security is universal. This human drive covers all scales, from individual homesteads through neighborhood and city limits to state and national boundaries. We have long declared borders, built walls, demarcated rivers and mountain ridges, and had arbitrary lines mapped across deserts. This trait relates to a wish to enclose that which we desire or perhaps exclude that which is feared. Multinational alliances as well as community interest groups are all motivated by the human capacity for expression of cooperation and conflict in the control of Earth's surface.

Related themes: Regions, Movement, Human/Environment Interaction

Example: Grade 4—List and map examples from current events that illustrate incidents of conflict or cooperation, and note causal factors.

ESSENTIAL ELEMENT V: ENVIRONMENT AND SOCIETY

Human fascination with remaking the landscape into something new seems to be as old as humankind itself. From pit dwellings to the most complex skyscraper, we have steadily made efforts to craft more productive, satisfying and aesthetically pleasing niches. The ramifications of environmental modification by human action will be a dominant theme of the next century as we develop ever more powerful technology. Geography will be a major force in understanding these changes and helping to guide future changes in the landscape.

STANDARD 14
How human actions modify the physical environment

When humans first occupied the environment, levels of technology were low enough that modifications of the physical setting were generally simple, although significant over time. However, as we have developed more powerful technology to assist us in such modification, we have made hot areas cool, cold areas warm, dry areas gardenlike, and wet areas habitable. Changing the landscape has become a signature of human use of Earth, and will be a significant theme as we see just what we have gained (and lost) in such transformations.

Related themes: Human/Environment Interaction, Place, Regions
Example: Grade 12—Use primary sources, historical records, and literature (e.g., Steinbeck's *The Grapes of Wrath*) to describe and chart land-use changes over time.

STANDARD 15
How physical systems affect human systems

Expanding settlement of flood plains, coastal margins, and seismic zones has brought us face-to-face with striking evidence of ways in which physical systems have profound effects on human systems. Less dramatic—but ultimately more significant—aspects of the effect of physical systems on human systems are such issues as freshwater use, ozone depletion, global warming, and soil loss. Knowledge of Earth's physical systems will be critical to the human use of Earth in the years to come and is central to *Geography for Life*.

Related themes: Place, Regions, Human/Environment Interaction
Example: Grade 8—Collect, map, and categorize newspaper or other stories concerning environmental problems (e.g., flooding, earthquakes).

STANDARD 16
The changes that occur in the meaning, use, distribution, and importance of resources

We extract, process, market, and consume those things we value in the environment. The activity related to putting values on resources, and the subsequent demands on the environment, establish patterns of economic, political, and cultural interaction. Some natural resources we require: air, water, vegetation—and space. Others commonly used, such as oil, tin, diamonds, bananas, and coffee, have gained their value by human decisions that generally relate to levels of technology and economic development. A geographer must understand what makes an item a resource, and what the subsequent geographic implications of such an appraisal might be.

Related themes: Human/Environment Interaction, Place, Regions
Example: Grade 4—Explain the relationship between the distribution of resources and settlement patterns.

ESSENTIAL ELEMENT VI: THE USES OF GEOGRAPHY

Central to learning the utility of geography is understanding its role in history and in the development of the diverse patterns of human settlement and activities. The geographically informed person should be able to make better use of the world at present and—perhaps most importantly—improve the capacity for planning for the future. Using the spatial and environmental perspectives of the geographer in conjunction with the skills outlined in *Geography for Life*, we can achieve the full power of these geography standards.

STANDARD 17
How to apply geography to interpret the past

An understanding of spatial and environmental perspectives leads to a fuller appreciation of the human use of Earth in the past. By determining how people have assessed their own settings, and gaining understanding of why they used their settings as they did—or changed them the way they did—we can see the role that geography has played in our histories.

Related themes: Human/Environment Interaction, Movement, Regions

Example: Grade 12—Analyze the role of physical and human geographic factors in establishing agricultural/industrial patterns, and relate these patterns to the growth of urban areas and rural-to-urban migration.

STANDARD 18
How to apply geography to interpret the present and plan for the future

Geography leads people to think about spatial patterns, connections between places, integration of local to global scales, diversity, and systems. With such a scope, it is easy to see how completely geography influences the present, and how it can be significant in achieving effective planning for the future. Issues that range from resources to population to paths of movement all relate to the essence of geography. Being able to put this breadth of impact to work in planning for the future is one of the benefits of being geographically well-informed.

Related themes: Regions, Human/Environment Interaction, Place

Example: Grade 8—Describe some major environmental changes taking place; locate and map areas in which there is currently conflict over the use of resources.

GEOGRAPHY PUBLICATIONS

NATIONAL GEOGRAPHY STANDARDS

- ***Geography for Life: National Geography Standards 1994***

The full 272-page national standards publication for teachers, curriculum developers, and other educators

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These geography curriculum and teaching guides were prepared by the Geographic Education National Implementation Project (GENIP). GENIP is a consortium of four geographic organizations: the Association of American Geographers, the American Geographical Society, the National Council for Geographic Education, and the National Geographic Society. The frameworks of these booklets are based on the five themes, but these same themes are present throughout the standards in *Geography for Life*.

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